

Table 6.1
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2002-11	2007-11
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.5	1998-08	-2.3*	2008-11	-4.3*			-3.0*	-3.8*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-08	-2.5*	2008-11	-4.6*			-3.2*	-4.0*
Black	1975-80	3.3*	1980-04	-0.2	2004-11	-3.5*							-2.8*	-3.5*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-95	-2.1*	1995-98	1.6	1998-08	-2.2*	2008-11	-4.1*					-2.8*	-3.6*
White	1992-95	-2.1*	1995-98	1.7	1998-08	-2.3*	2008-11	-4.3*					-3.0*	-3.8*
Black	1992-04	-0.1	2004-11	-3.2*									-2.5*	-3.2*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.5	1998-08	-2.3*	2008-11	-4.6*			-3.1*	-4.1*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-08	-2.5*	2008-11	-5.1*			-3.4*	-4.4*
Black	1975-80	3.3*	1980-04	-0.2	2004-11	-3.8*							-3.0*	-3.8*
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-95	-2.1*	1995-98	1.6	1998-08	-2.2*	2008-11	-4.4*					-2.9*	-3.9*
White	1992-95	-2.2*	1995-98	1.7	1998-08	-2.4*	2008-11	-4.8*					-3.2*	-4.2*
White NH ^{ef}	1992-95	-2.2*	1995-98	1.8	1998-08	-2.5*	2008-11	-4.9*					-3.3*	-4.3*
Black	1992-03	-0.1	2003-09	-2.4*	2009-11	-7.0*							-3.2*	-4.7*
Black NH ^{ef}	1992-03	-0.1	2003-09	-2.3*	2009-11	-6.9*							-3.1*	-4.6*
API ^e	1992-01	-0.3	2001-11	-2.2*									-2.2*	-2.2*
AI/AN ^{eg}	1992-11	-0.3											-0.3	-0.3
Hispanic ^f	1992-98	1.1	1998-08	-0.5	2008-11	-3.7*							-1.6*	-2.9*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).
 The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
 Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
 The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
 API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
 Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
 The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.
 Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.
 * The APC/AAPC is significantly different from zero ($p < .05$).
 - Joinpoint regression line analysis could not be performed on data series.

Table 6.2
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2002-11	2007-11
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.0	1998-08	-2.8*	2008-11	-4.1*	-3.2*	-3.8*
White	1975-85	1.1*	1985-91	-1.4*	1991-95	-3.3*	1995-98	2.1	1998-08	-2.9*	2008-11	-4.5*	-3.5*	-4.1*
Black	1975-80	4.5*	1980-03	0.0	2003-11	-3.4*							-3.1*	-3.4*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-95	-2.6*	1995-98	1.4	1998-08	-2.5*	2008-11	-4.0*					-3.0*	-3.6*
White	1992-95	-2.8*	1995-98	1.5	1998-08	-2.7*	2008-11	-4.4*					-3.3*	-4.0*
Black	1992-03	-0.1	2003-11	-3.0*									-2.7*	-3.0*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.0	1998-08	-2.8*	2008-11	-4.4*	-3.3*	-4.0*
White	1975-85	1.1*	1985-91	-1.4*	1991-95	-3.3*	1995-98	2.0	1998-08	-3.0*	2008-11	-5.0*	-3.7*	-4.5*
Black	1975-80	4.5*	1980-03	0.0	2003-11	-3.7*							-3.3*	-3.7*
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-95	-2.6*	1995-98	1.4	1998-08	-2.5*	2008-11	-4.2*					-3.1*	-3.8*
White	1992-95	-2.8*	1995-98	1.5	1998-08	-2.7*	2008-11	-4.8*					-3.4*	-4.3*
White NH ^{ef}	1992-95	-2.9*	1995-98	1.5	1998-08	-2.9*	2008-11	-4.9*					-3.6*	-4.4*
Black	1992-04	-0.2	2004-11	-3.6*									-2.9*	-3.6*
Black NH ^{ef}	1992-04	-0.2	2004-11	-3.5*									-2.8*	-3.5*
API ^e	1992-01	-0.5	2001-11	-2.5*									-2.5*	-2.5*
AI/AN ^{eg}	1992-11	-0.2											-0.2	-0.2
Hispanic ^f	1992-98	1.7	1998-11	-1.2*									-1.2*	-1.2*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).
 The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
^a Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
^b Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
^c Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
^e API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
^f Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
 The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.
^g Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.
 * The APC/AAPC is significantly different from zero (p<.05).
 - Joinpoint regression line analysis could not be performed on data series.

Table 6.3
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2002-11	2007-11
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-85	0.3	1985-95	-1.9*	1995-98	1.8	1998-08	-2.0*	2008-11	-4.5*			-2.8*	-3.9*
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.0	1998-08	-2.2*	2008-11	-4.5*			-3.0*	-3.9*
Black	1975-05	-0.1	2005-11	-4.2*									-2.9*	-4.2*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-95	-1.8*	1995-98	1.8	1998-08	-1.9*	2008-11	-4.2*					-2.7*	-3.6*
White	1992-95	-1.7	1995-98	1.7	1998-08	-2.1*	2008-11	-4.3*					-2.8*	-3.7*
Black	1992-00	0.5	2000-09	-1.5*	2009-11	-8.0*							-3.0*	-4.8*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-85	0.3	1985-95	-1.9*	1995-98	1.8	1998-08	-2.0*	2008-11	-4.8*			-3.0*	-4.1*
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.0	1998-08	-2.2*	2008-11	-5.0*			-3.2*	-4.3*
Black	1975-05	-0.1	2005-11	-4.6*									-3.1*	-4.6*
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-95	-1.8*	1995-98	1.8	1998-08	-2.0*	2008-11	-4.5*					-2.8*	-3.9*
White	1992-95	-1.7	1995-98	1.7	1998-08	-2.1*	2008-11	-4.7*					-3.0*	-4.1*
White NH ^{ef}	1992-95	-1.7	1995-98	1.9	1998-08	-2.2*	2008-11	-4.8*					-3.1*	-4.2*
Black	1992-00	0.5	2000-09	-1.6*	2009-11	-8.9*							-3.2*	-5.3*
Black NH ^{ef}	1992-00	0.4	2000-09	-1.5*	2009-11	-8.9*							-3.2*	-5.2*
API ^e	1992-11	-1.1*											-1.1*	-1.1*
AI/AN ^{eg}	1992-11	-0.5											-0.5	-0.5
Hispanic ^f	1992-07	0.0	2007-11	-3.4*									-1.5*	-3.4*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races														
White														
White NH ^{ef}														
Black														
Black NH ^{ef}														
API ^e														
AI/AN ^{eg}														
Hispanic ^f														

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 The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
 Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
 The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
 API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
 Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
 The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.
 Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.
 * The APC/AAPC is significantly different from zero (p<.05).
 - Joinpoint regression line analysis could not be performed on data series.

Table 6.4
Cancer of the Colon (Invasive) and Cancer of the Rectum (Invasive)

Trends in SEER 9 Observed Incidence^a Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints,
By Race and Sex

		JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d
		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-11
<u>SEER 9 Observed Incidence^a for Cancer of the Colon, 1975-2011</u>														
All Races	Both Sexes	1975-85	1.1*	1985-95	-1.6*	1995-00	0.0	2000-08	-2.7*	2008-11	-5.0*			-4.4*
All Races	Male	1975-85	1.7*	1985-91	-1.2*	1991-95	-3.1*	1995-98	1.3	1998-04	-2.5*	2004-11	-3.8*	-3.8*
All Races	Female	1975-85	0.6*	1985-93	-1.8*	1993-01	-0.2	2001-09	-2.6*	2009-11	-6.7*			-4.7*
White	Both Sexes	1975-85	1.1*	1985-95	-1.9*	1995-98	1.4	1998-08	-2.5*	2008-11	-5.8*			-5.0*
White	Male	1975-85	1.7*	1985-91	-1.4*	1991-95	-3.1*	1995-98	1.6	1998-08	-3.0*	2008-11	-5.5*	-4.9*
White	Female	1975-85	0.5*	1985-95	-1.9*	1995-98	1.8	1998-08	-2.1*	2008-11	-6.0*			-5.1*
Black	Both Sexes	1975-80	3.6*	1980-03	-0.1	2003-11	-4.0*							-4.0*
Black	Male	1975-85	2.2*	1985-03	-0.2	2003-11	-4.1*							-4.1*
Black	Female	1975-04	-0.1	2004-11	-4.6*									-4.6*
<u>SEER 9 Observed Incidence^a for Cancer of the Rectum, 1975-2011</u>														
All Races	Both Sexes	1975-87	-0.3	1987-95	-2.4*	1995-98	2.6	1998-11	-2.3*					-2.3*
All Races	Male	1975-89	-0.3	1989-94	-3.6*	1994-98	1.8	1998-11	-2.6*					-2.6*
All Races	Female	1975-84	-0.2	1984-95	-2.2*	1995-98	2.3	1998-11	-2.0*					-2.0*
White	Both Sexes	1975-85	-0.1	1985-95	-2.3*	1995-98	2.5	1998-11	-2.7*					-2.7*
White	Male	1975-89	-0.3	1989-94	-3.9*	1994-99	1.1	1999-11	-3.2*					-3.2*
White	Female	1975-84	-0.2	1984-95	-2.3*	1995-98	2.4	1998-11	-2.4*					-2.4*
Black	Both Sexes	1975-11	-0.2											-0.2
Black	Male	1975-08	0.0	2008-11	-7.0									-5.3
Black	Female	1975-11	-0.2											-0.2

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
The APC/AAPC is significantly different from zero ($p < .05$).
- Joinpoint regression line analysis could not be performed on data series.

a
b
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Table 6.5
Cancer of the Colon and Rectum (Invasive)

Delay-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	59.53	68.44	53.66	60.18	69.75	54.05	56.85	59.33	54.66
1976	61.34	71.72	54.12	62.13	72.66	55.00	55.04	58.53	51.28
1977	62.40	73.48	54.95	63.19	74.32	55.76	60.69	75.66	51.47
1978	62.03	72.34	55.25	62.78	73.87	55.60	62.04	65.70	60.42
1979	62.37	74.11	54.58	62.96	75.19	54.96	58.57	61.79	56.16
1980	63.75	74.55	56.54	63.95	74.88	56.83	70.83	79.71	64.23
1981	64.25	75.83	56.50	64.89	76.70	57.16	62.76	72.77	55.94
1982	62.79	75.18	54.51	63.44	76.24	55.05	61.26	68.98	55.93
1983	63.67	75.58	55.61	64.29	76.60	56.07	66.68	75.69	61.01
1984	64.82	77.65	56.08	65.84	79.28	56.75	62.48	70.44	58.22
1985	66.31	79.17	57.33	67.22	80.22	58.39	63.97	74.31	56.29
1986	64.19	77.79	54.71	64.60	78.90	54.77	64.62	73.12	58.64
1987	62.71	77.48	52.67	62.89	78.22	52.61	66.24	77.52	59.04
1988	61.38	75.20	51.81	61.57	75.80	51.76	62.99	72.45	56.60
1989	61.71	74.99	52.43	61.97	75.46	52.68	64.53	79.47	54.71
1990	60.71	74.38	51.29	60.70	74.81	51.04	66.80	74.93	61.72
1991	59.50	72.93	50.05	59.33	73.16	49.67	65.64	76.35	58.21
1992	58.01	70.42	49.22	57.87	70.71	48.75	65.46	78.52	57.27
1993	56.81	68.45	48.32	56.35	68.12	47.81	64.50	78.08	55.31
1994	55.65	66.29	47.75	55.42	66.38	47.21	64.47	75.25	58.05
1995	54.06	63.84	46.97	53.73	63.43	46.64	62.07	71.49	56.05
1996	54.80	65.60	46.71	54.80	65.98	46.44	58.63	66.78	53.02
1997	56.44	68.12	47.96	56.46	67.99	48.08	64.60	77.49	56.26
1998	56.81	67.12	49.32	56.81	67.38	49.10	62.99	74.07	56.08
1999	55.50	65.76	47.86	55.37	65.95	47.26	63.29	72.10	58.15
2000	54.16	63.69	46.79	53.88	63.20	46.58	64.48	73.97	58.26
2001	53.61	63.06	46.24	53.08	62.72	45.45	64.46	74.99	57.73
2002	53.18	61.56	46.65	52.43	60.47	46.02	63.29	74.38	56.50
2003	50.84	59.53	43.95	50.40	58.80	43.59	62.63	75.42	54.74
2004	49.91	58.62	43.20	49.28	58.23	42.23	62.54	74.17	54.86
2005	47.84	55.30	41.92	47.60	55.38	41.26	58.36	64.97	54.78
2006	46.88	53.30	41.67	46.33	52.84	40.88	58.14	65.35	53.48
2007	46.39	53.31	40.73	45.69	52.41	40.13	57.90	65.82	52.27
2008	45.32	51.60	40.11	44.76	50.82	39.66	54.69	64.17	47.74
2009	43.31	48.95	38.70	42.24	47.67	37.67	53.95	61.21	49.46
2010	40.99	47.11	36.01	39.98	46.03	34.90	49.81	57.47	44.78
2011	39.79	45.61	35.02	39.06	44.39	34.55	48.34	56.17	42.88

Additional information on the model used to delay-adjust SEER Incidence rates can be found at [\(http://surveillance.cancer.gov/delay/\)](http://surveillance.cancer.gov/delay/).

- ^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 - Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 6.6
Cancer of the Colon and Rectum (Invasive)

Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2011	55.00	64.68	47.81	55.06	64.85	47.77	60.63	69.98	54.50
1975	59.53	68.44	53.66	60.18	69.75	54.05	56.85	59.33	54.66
1976	61.34	71.72	54.12	62.13	72.66	55.00	55.04	58.53	51.28
1977	62.40	73.48	54.95	63.19	74.32	55.76	60.69	75.66	51.47
1978	62.03	72.34	55.25	62.78	73.87	55.60	62.04	65.70	60.42
1979	62.37	74.11	54.58	62.96	75.19	54.96	58.57	61.79	56.16
1980	63.75	74.55	56.54	63.95	74.88	56.83	70.83	79.71	64.23
1981	64.25	75.83	56.50	64.89	76.70	57.16	62.76	72.77	55.94
1982	62.78	75.18	54.51	63.43	76.24	55.04	61.25	68.97	55.92
1983	63.67	75.58	55.61	64.28	76.59	56.07	66.66	75.67	60.99
1984	64.82	77.65	56.08	65.83	79.26	56.74	62.46	70.42	58.20
1985	66.30	79.17	57.32	67.21	80.20	58.37	63.94	74.28	56.27
1986	64.18	77.78	54.71	64.59	78.88	54.76	64.59	73.09	58.62
1987	62.70	77.47	52.66	62.88	78.20	52.60	66.21	77.48	59.01
1988	61.37	75.19	51.80	61.55	75.77	51.74	62.96	72.41	56.57
1989	61.70	74.98	52.42	61.95	75.43	52.65	64.47	79.41	54.67
1990	60.70	74.36	51.28	60.66	74.77	51.02	66.74	74.85	61.66
1991	59.48	72.91	50.04	59.30	73.13	49.65	65.59	76.29	58.16
1992	57.99	70.40	49.21	57.84	70.67	48.73	65.40	78.45	57.22
1993	56.79	68.43	48.30	56.32	68.08	47.78	64.43	77.99	55.25
1994	55.63	66.27	47.73	55.38	66.33	47.18	64.38	75.15	57.98
1995	54.04	63.81	46.95	53.68	63.37	46.60	61.97	71.38	55.96
1996	54.77	65.57	46.69	54.75	65.91	46.39	58.52	66.66	52.93
1997	56.41	68.09	47.94	56.39	67.92	48.03	64.47	77.33	56.15
1998	56.77	67.08	49.29	56.74	67.30	49.04	62.85	73.91	55.96
1999	55.46	65.72	47.83	55.28	65.83	47.18	63.10	71.89	57.98
2000	54.12	63.65	46.76	53.77	63.07	46.48	64.26	73.72	58.06
2001	53.57	63.02	46.21	52.95	62.57	45.34	64.21	74.70	57.51
2002	53.14	61.52	46.61	52.28	60.31	45.90	63.00	74.04	56.25
2003	50.79	59.48	43.91	50.24	58.61	43.45	62.30	75.02	54.45
2004	49.87	58.56	43.15	49.09	58.01	42.08	62.17	73.73	54.53
2005	47.79	55.23	41.87	47.39	55.14	41.08	57.96	64.52	54.41
2006	46.81	53.23	41.60	46.09	52.57	40.68	57.68	64.83	53.05
2007	46.31	53.21	40.65	45.42	52.10	39.90	57.38	65.23	51.79
2008	45.20	51.47	40.00	44.45	50.47	39.39	54.12	63.51	47.24
2009	43.16	48.78	38.55	41.86	47.24	37.33	53.23	60.40	48.80
2010	40.75	46.85	35.80	39.46	45.43	34.44	48.89	56.40	43.94
2011	39.30	45.06	34.57	38.12	43.33	33.72	46.77	54.34	41.49

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 - Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.7
Cancer of the Colon (Invasive)

Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2011	39.64	44.95	35.78	39.65	45.06	35.70	46.42	52.53	42.57
1975	41.35	45.40	38.91	41.73	46.13	39.15	42.83	44.14	41.64
1976	43.04	47.75	39.94	43.43	48.19	40.38	43.08	43.60	41.91
1977	43.96	49.54	40.35	44.66	50.07	41.18	45.39	58.33	37.66
1978	43.84	49.10	40.59	44.10	49.84	40.63	47.65	48.81	47.67
1979	43.77	50.21	39.61	44.11	51.03	39.72	44.68	45.73	43.84
1980	45.57	50.67	42.34	45.58	50.88	42.33	55.19	58.35	52.85
1981	45.48	51.34	41.73	45.89	51.94	42.14	46.85	50.60	44.36
1982	45.76	53.44	40.68	46.07	54.08	40.85	48.27	52.48	45.19
1983	46.11	53.04	41.63	46.42	53.50	41.87	50.20	58.52	45.25
1984	46.51	54.57	41.32	47.03	55.55	41.58	48.75	54.18	46.05
1985	47.88	55.03	42.96	48.41	55.61	43.65	49.94	57.49	44.21
1986	46.80	54.37	41.57	47.07	55.17	41.53	49.29	55.41	45.33
1987	45.23	54.42	39.16	45.14	54.51	39.07	51.35	59.84	45.73
1988	44.30	52.60	38.66	44.29	52.87	38.43	48.75	54.02	45.27
1989	44.38	52.45	38.96	44.47	52.50	39.18	48.95	60.41	41.62
1990	44.19	51.99	38.92	44.06	52.02	38.73	52.08	57.83	48.56
1991	43.60	51.84	37.91	43.30	51.85	37.40	51.74	57.75	47.67
1992	42.29	49.64	37.23	42.06	49.76	36.73	50.83	60.31	45.17
1993	41.60	48.95	36.32	41.07	48.64	35.66	51.16	60.58	45.02
1994	40.85	46.94	36.36	40.64	47.05	35.83	50.07	56.95	46.30
1995	39.66	45.05	35.87	39.29	44.64	35.48	48.81	55.07	45.33
1996	39.38	45.40	34.89	39.31	45.81	34.44	44.63	48.54	42.04
1997	41.10	48.38	35.98	41.11	48.26	36.14	49.21	59.02	42.63
1998	41.06	46.87	37.04	40.99	47.17	36.62	47.59	54.38	43.98
1999	39.80	45.45	35.67	39.59	45.46	35.13	48.46	54.88	44.84
2000	39.38	44.45	35.49	39.00	43.94	35.18	51.01	57.33	47.06
2001	39.23	44.11	35.51	38.82	43.84	34.90	49.05	55.81	44.82
2002	38.68	43.31	35.11	37.92	42.22	34.51	49.53	57.19	44.82
2003	36.97	41.47	33.37	36.59	40.74	33.15	47.62	56.73	42.10
2004	36.33	41.40	32.54	35.81	41.08	31.78	47.34	54.72	42.56
2005	34.46	38.00	31.68	34.23	38.11	31.10	44.24	48.67	42.18
2006	33.94	37.35	31.16	33.46	36.90	30.57	44.60	49.32	41.48
2007	33.03	36.16	30.54	32.67	35.78	30.19	42.32	46.28	39.35
2008	32.70	35.90	30.04	32.40	35.57	29.73	40.08	45.55	36.14
2009	30.87	33.31	28.91	30.13	32.53	28.09	39.33	44.16	36.72
2010	28.84	32.16	26.16	28.13	31.34	25.41	35.52	40.13	32.67
2011	27.86	30.82	25.43	27.12	29.79	24.85	35.01	40.46	31.28

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.8
Cancer of the Rectum (Invasive)

Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2011	15.36	19.73	12.03	15.41	19.79	12.07	14.20	17.45	11.93
1975	18.18	23.04	14.75	18.45	23.62	14.89	14.02	15.19	13.01
1976	18.30	23.97	14.18	18.70	24.48	14.63	11.96	14.93	9.37
1977	18.44	23.94	14.60	18.54	24.26	14.59	15.30	17.33	13.81
1978	18.19	23.25	14.66	18.67	24.03	14.97	14.39	16.89	12.76
1979	18.60	23.89	14.97	18.85	24.16	15.24	13.90	16.06	12.31
1980	18.18	23.88	14.20	18.37	24.00	14.51	15.65	21.36	11.38
1981	18.77	24.49	14.77	19.00	24.76	15.02	15.92	22.17	11.59
1982	17.02	21.74	13.83	17.36	22.15	14.19	12.98	16.49	10.73
1983	17.56	22.54	13.98	17.86	23.09	14.19	16.46	17.15	15.75
1984	18.31	23.08	14.76	18.80	23.72	15.16	13.71	16.24	12.15
1985	18.42	24.13	14.36	18.80	24.60	14.72	14.00	16.79	12.06
1986	17.39	23.41	13.13	17.52	23.72	13.23	15.31	17.68	13.28
1987	17.47	23.05	13.50	17.74	23.69	13.53	14.87	17.64	13.29
1988	17.07	22.59	13.14	17.27	22.90	13.31	14.21	18.38	11.30
1989	17.32	22.52	13.45	17.47	22.93	13.47	15.52	19.00	13.05
1990	16.51	22.37	12.36	16.60	22.75	12.28	14.66	17.02	13.10
1991	15.88	21.08	12.13	16.00	21.28	12.25	13.85	18.55	10.50
1992	15.70	20.75	11.97	15.78	20.91	11.99	14.57	18.14	12.05
1993	15.19	19.48	11.98	15.25	19.44	12.12	13.27	17.42	10.22
1994	14.78	19.33	11.37	14.74	19.28	11.35	14.32	18.21	11.68
1995	14.38	18.76	11.07	14.39	18.73	11.12	13.16	16.31	10.63
1996	15.39	20.17	11.80	15.44	20.11	11.95	13.90	18.12	10.89
1997	15.30	19.70	11.96	15.29	19.66	11.89	15.27	18.31	13.52
1998	15.71	20.21	12.25	15.75	20.13	12.41	15.26	19.52	11.97
1999	15.66	20.27	12.17	15.68	20.38	12.05	14.64	17.01	13.13
2000	14.75	19.21	11.27	14.77	19.14	11.30	13.25	16.39	11.01
2001	14.34	18.91	10.70	14.13	18.73	10.44	15.16	18.88	12.68
2002	14.46	18.21	11.51	14.36	18.08	11.39	13.47	16.86	11.43
2003	13.83	18.01	10.55	13.65	17.87	10.30	14.68	18.29	12.35
2004	13.53	17.16	10.61	13.29	16.93	10.30	14.83	19.01	11.97
2005	13.33	17.23	10.19	13.15	17.04	9.99	13.72	15.85	12.22
2006	12.87	15.88	10.44	12.63	15.67	10.10	13.08	15.51	11.57
2007	13.27	17.06	10.11	12.76	16.32	9.71	15.06	18.95	12.44
2008	12.50	15.57	9.96	12.05	14.91	9.66	14.04	17.96	11.10
2009	12.28	15.47	9.64	11.73	14.71	9.23	13.90	16.24	12.09
2010	11.91	14.69	9.64	11.33	14.09	9.03	13.37	16.27	11.28
2011	11.44	14.24	9.14	11.00	13.55	8.88	11.76	13.88	10.20

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.10
Cancer of the Colon and Rectum (Invasive)

SEER Incidence^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2007-2011									
All ages	43.7	50.6	38.2	42.9	49.6	37.3	53.6	62.3	47.5
Under 65	18.1	20.5	15.8	17.3	19.7	14.9	24.0	26.8	21.7
65 and over	220.8	258.4	192.7	219.8	256.9	191.6	258.0	308.1	226.0
All ages (IARC world std) ^c	27.4	31.8	23.6	26.6	31.0	22.8	34.8	40.3	30.7
Age-Specific Rates, 2007-2011									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.3	0.4	0.3	0.3	0.3	0.3	-	-	-
20-24	1.0	1.1	0.8	1.0	1.1	0.9	0.7	0.8	-
25-29	2.2	2.2	2.2	2.2	2.3	2.2	2.1	1.9	2.3
30-34	4.6	4.9	4.3	4.7	5.0	4.4	3.9	3.4	4.4
35-39	8.7	8.8	8.6	8.7	8.8	8.7	9.3	9.2	9.4
40-44	17.1	17.8	16.4	16.6	17.3	15.9	20.5	20.2	20.8
45-49	30.6	33.3	27.9	29.3	32.2	26.3	38.9	41.7	36.4
50-54	57.4	64.0	51.0	53.8	60.6	47.1	77.3	82.9	72.3
55-59	71.9	84.6	59.9	67.8	80.1	55.9	101.2	119.3	85.8
60-64	99.5	120.3	80.5	94.7	114.6	75.9	142.2	169.7	119.8
65-69	145.0	174.8	118.6	140.2	169.4	113.9	189.0	226.0	160.3
70-74	194.7	233.5	162.5	192.2	229.8	160.4	241.3	297.9	200.4
75-79	241.6	279.4	213.0	242.7	280.2	213.6	279.1	317.8	254.5
80-84	290.0	333.7	261.4	291.7	334.0	263.5	316.1	402.9	269.7
85+	325.8	371.0	303.5	329.4	376.4	306.2	340.9	383.9	323.8
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2007-2011									
All ages									
Under 65									
65 and over									
All ages (IARC world std) ^c									
Age-Specific Rates, 2007-2011									
<1									
1-4									
5-9									
10-14									
15-19									
20-24									
25-29									
30-34									
35-39									
40-44									
45-49									
50-54									
55-59									
60-64									
65-69									
70-74									
75-79									
80-84									
85+									

^a SEER 18 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

- Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.11
Cancer of the Colon (Invasive) and Cancer of the Rectum (Invasive)
SEER Incidence^a Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Cancer of the Colon</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2007-2011									
All ages	31.1	34.8	28.2	30.6	34.3	27.5	40.1	45.4	36.4
Under 65	11.3	12.4	10.2	10.7	11.8	9.6	16.4	17.7	15.4
65 and over	168.4	190.0	152.3	168.1	189.4	151.9	203.3	236.8	182.0
All ages (IARC world std) ^b	18.9	21.2	16.9	18.3	20.6	16.3	25.4	28.6	23.1
Age-Specific Rates, 2007-2011									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.2	0.3	0.2	0.2	0.3	0.2	-	-	-
20-24	0.6	0.7	0.5	0.6	0.7	0.6	0.4	-	-
25-29	1.3	1.3	1.4	1.3	1.3	1.4	1.2	1.0	1.4
30-34	2.8	2.9	2.7	2.9	3.0	2.8	2.6	2.3	2.8
35-39	5.2	5.2	5.3	5.2	5.2	5.1	6.0	5.3	6.7
40-44	10.2	10.2	10.3	9.8	9.9	9.6	13.7	12.3	15.0
45-49	17.8	18.5	17.2	16.8	17.6	16.0	25.3	25.7	25.0
50-54	34.2	37.2	31.4	31.9	35.3	28.4	49.9	51.7	48.3
55-59	45.7	52.0	39.7	42.5	48.4	36.9	71.4	83.4	61.1
60-64	67.4	78.4	57.2	63.6	74.4	53.5	104.1	119.2	91.8
65-69	102.5	119.9	87.1	99.0	116.3	83.5	142.2	166.1	123.8
70-74	144.3	167.0	125.5	142.6	164.7	124.0	187.4	224.3	160.8
75-79	185.5	206.3	169.7	186.5	206.8	170.7	223.9	248.5	208.3
80-84	228.5	252.8	212.5	231.0	254.2	215.6	251.1	318.0	215.3
85+	264.9	291.6	251.7	268.5	297.1	254.3	280.1	304.7	270.3
<u>Cancer of the Rectum</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2007-2011									
All ages	12.6	15.7	10.0	12.3	15.4	9.7	13.5	16.9	11.1
Under 65	6.8	8.1	5.6	6.6	7.9	5.4	7.6	9.1	6.3
65 and over	52.3	68.4	40.4	51.7	67.4	39.7	54.7	71.3	44.0
All ages (IARC world std) ^b	8.6	10.6	6.8	8.3	10.3	6.6	9.4	11.6	7.6
Age-Specific Rates, 2007-2011									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	-	0.1	-	-	-	-	-
20-24	0.4	0.4	0.3	0.4	0.4	0.3	-	-	-
25-29	0.9	0.9	0.9	0.9	1.0	0.8	0.9	0.9	0.9
30-34	1.8	2.0	1.6	1.8	2.0	1.5	1.3	1.1	1.6
35-39	3.5	3.7	3.4	3.6	3.6	3.6	3.3	3.9	2.8
40-44	6.9	7.6	6.1	6.8	7.4	6.3	6.8	7.9	5.8
45-49	12.7	14.9	10.7	12.5	14.6	10.4	13.6	16.0	11.4
50-54	23.2	26.7	19.7	21.9	25.3	18.6	27.4	31.2	24.0
55-59	26.2	32.6	20.2	25.2	31.7	19.1	29.8	35.8	24.6
60-64	32.2	41.9	23.2	31.0	40.2	22.3	38.1	50.4	28.0
65-69	42.5	54.9	31.6	41.2	53.1	30.4	46.8	60.0	36.6
70-74	50.4	66.4	37.0	49.6	65.1	36.4	53.9	73.6	39.6
75-79	56.1	73.1	43.3	56.2	73.4	42.8	55.2	69.3	46.2
80-84	61.6	81.0	48.9	60.7	79.9	47.9	65.0	84.9	54.4
85+	60.9	79.4	51.8	60.9	79.3	51.8	60.8	79.1	53.5

^a SEER 18 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.12
Cancer of the Colon and Rectum (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	-	-	-	-	-	-
1970-1973 ^a	-	-	-	-	-	-	-	-	-
1975-1977 ^b	49.8	48.9	50.6	50.0	49.3	50.7	44.6	43.3	45.8
1978-1980 ^b	51.2	50.2	52.2	51.6	50.6	52.5	45.4	43.3	46.9
1981-1983 ^b	54.0	53.8	54.2	54.4	54.4	54.3	46.4	42.7	49.5
1984-1986 ^b	57.7	57.7	57.6	58.4	58.5	58.2	48.3	47.4	49.0
1987-1989 ^b	59.6	59.8	59.3	60.0	60.5	59.5	52.2	49.9	54.4
1990-1992 ^b	61.2	61.0	61.3	61.9	61.7	62.1	52.7	54.3	51.3
1993-1995 ^b	59.9	59.7	60.0	60.5	60.3	60.6	51.7	51.2	52.1
1996-1998 ^b	62.5	62.4	62.5	63.1	62.9	63.2	53.8	54.8	53.0
1999-2003 ^b	65.5	66.0	65.0	66.7	67.2	66.2	55.6	55.8	55.4
2004-2010 ^b	66.1 ^f	66.4 ^f	65.7 ^f	66.9 ^f	67.6 ^f	66.2 ^f	57.8 ^f	56.2 ^f	59.2 ^f
5-Year Period Survival (Percent) ^{cd}									
2010	65.0	65.2	64.8	65.6	65.9	65.4	57.9	56.7	58.9
Stage Distribution (%) 2004-2010 ^{ce}									
All Stages									
Number of cases	211,799	108,547	103,252	167,307	86,572	80,735	25,047	11,893	13,154
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	40	40	39	40	40	39	38	37	38
Regional	36	35	36	36	36	36	33	33	33
Distant	20	20	20	20	20	20	24	25	24
Unstaged	5	4	5	4	4	5	5	5	5
5-Year Relative Survival (Percent), 2004-2010 ^c									
Age at Diagnosis:									
Ages <45	67.6	66.2	69.3	69.3	67.3	71.5	59.2	56.1	62.2
Ages 45-54	70.8	69.6	72.3	71.6	70.5	73.0	63.5	60.7	66.2
Ages 55-64	68.4	67.8	69.2	69.0	68.5	69.8	62.0	60.3	63.9
Ages 65-74	67.4	66.9	67.9	67.9	67.7	68.3	59.6	56.9	62.1
Ages 75+	57.0	57.2	56.8	58.2	58.5	58.1	44.8	44.4	45.0
Ages <65	69.1	68.2	70.3	69.9	69.1	71.2	62.2	59.9	64.5
Ages 65+	61.4	62.0	60.8	62.2	62.9	61.6	52.5	51.7	53.0
Stage ^e :									
All Stages	64.7	65.0	64.5	65.4	65.7	65.0	57.7	56.6	58.8
Localized	89.8	89.9	89.8	90.0	90.1	90.0	86.7	86.3	87.0
Regional	70.5	70.4	70.7	71.1	71.2	71.1	64.4	62.3	66.4
Distant	12.9	12.4	13.3	13.4	12.8	14.1	9.2	8.6	9.6
Unstaged	33.2	36.2	30.7	30.6	33.4	28.3	36.9	40.4	34.0

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2011.

^c SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Based on follow-up of patients into 2011.

^d Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2004-2010 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 6.13
Cancer of the Colon (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	43	42	44	34	32	35
1970-1973 ^a	-	-	-	49	47	50	37	36	38
1975-1977 ^b	50.6	50.1	51.1	50.9	50.5	51.3	44.7	44.0	45.3
1978-1980 ^b	52.3	51.3	53.2	52.4	51.3	53.4	48.9	47.4	49.8
1981-1983 ^b	55.2	55.6	54.8	55.4	56.1	54.8	48.5	44.5	51.5
1984-1986 ^b	58.3	58.8	57.8	59.0	59.6	58.5	49.1	48.9	49.2
1987-1989 ^b	60.2	60.7	59.6	60.6	61.4	59.9	52.3	50.6	53.6
1990-1992 ^b	62.0	62.3	61.7	62.8	63.1	62.4	53.2	54.5	52.1
1993-1995 ^b	59.8	60.1	59.5	60.5	60.7	60.2	51.1	51.1	51.0
1996-1998 ^b	62.2	62.4	62.0	62.9	62.9	62.9	53.5	55.4	51.9
1999-2003 ^b	64.9	65.5	64.4	66.3	66.9	65.6	54.1	54.2	54.0
2004-2010 ^b	65.4 ^f	66.0 ^f	64.8 ^f	66.5 ^f	67.3 ^f	65.8 ^f	55.8 ^f	55.4 ^f	56.1 ^f
5-Year Period Survival (Percent) ^{cd}									
2010	64.3	64.9	63.8	65.3	65.8	64.8	56.0	55.8	56.2
Stage Distribution (%) 2004-2010 ^{ce}									
All Stages									
Number of cases	148,788	72,777	76,011	117,707	58,145	59,562	18,481	8,492	9,989
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	38	39	37	38	39	37	35	35	35
Regional	37	36	37	37	37	38	35	35	35
Distant	21	21	21	21	21	21	26	26	26
Unstaged	4	4	5	4	3	5	4	4	4
5-Year Relative Survival (Percent), 2004-2010 ^c									
Age at Diagnosis:									
Ages <45	66.3	66.1	66.4	68.7	68.1	69.3	57.4	55.1	59.4
Ages 45-54	68.5	68.0	69.0	69.5	69.1	70.1	61.2	59.4	62.8
Ages 55-64	67.1	67.0	67.4	68.1	67.9	68.3	60.4	59.6	61.3
Ages 65-74	67.4	67.0	67.7	68.2	68.0	68.5	58.5	56.7	60.1
Ages 75+	58.2	58.5	58.1	59.7	60.0	59.5	45.3	45.0	45.4
Ages <65	67.5	67.2	67.8	68.6	68.3	69.1	60.3	59.0	61.6
Ages 65+	61.9	62.5	61.4	63.0	63.6	62.4	52.0	51.7	52.2
Stage ^e :									
All Stages	64.0	64.5	63.6	65.0	65.5	64.4	56.2	55.8	56.7
Localized	90.8	91.2	90.4	91.3	91.7	90.9	86.9	87.2	86.7
Regional	70.9	70.6	71.1	71.5	71.5	71.5	65.0	63.0	66.6
Distant	12.7	12.3	13.0	13.3	12.7	14.0	8.7	8.0	9.2
Unstaged	25.4	29.4	22.5	24.1	27.7	21.5	26.0	32.7	21.2

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2011.

^c SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Based on follow-up of patients into 2011.

^d Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2004-2010 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 6.14
Cancer of the Rectum (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	38	36	41	27	28	27
1970-1973 ^a	-	-	-	45	43	48	30	20	40
1975-1977 ^b	48.1	46.9	49.5	48.2	47.3	49.4	44.4	41.4	46.8
1978-1980 ^b	48.9	48.3	49.5	49.7	49.3	50.2	34.6	33.5	35.5
1981-1983 ^b	51.4	50.2	52.8	52.0	51.0	53.2	39.9	37.7	42.2
1984-1986 ^b	56.2	55.5	57.1	57.0	56.4	57.7	45.8	43.1	48.2
1987-1989 ^b	58.1	57.9	58.4	58.7	58.9	58.4	52.3	47.7	56.9
1990-1992 ^b	59.2	58.4	60.2	59.9	59.0	61.0	51.1	53.5	48.5
1993-1995 ^b	60.1	59.0	61.6	60.5	59.4	62.0	53.9	51.6	56.4
1996-1998 ^b	63.3	62.4	64.3	63.6	62.9	64.5	54.8	53.2	56.2
1999-2003 ^b	67.1	67.0	67.1	67.8	67.9	67.8	60.2	60.1	60.0
2004-2010 ^b	67.8 ^f	67.4 ^f	68.3 ^f	68.0 ^f	68.3 ^f	67.5 ^f	63.2 ^f	58.1 ^f	68.3 ^f
5-Year Period Survival (Percent) ^{cd}									
2010	66.7	66.0	67.6	66.4	66.0	67.0	63.0	59.1	67.3
Stage Distribution (%) 2004-2010 ^{ce}									
All Stages									
Number of cases	63,011	35,770	27,241	49,600	28,427	21,173	6,566	3,401	3,165
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	44	43	45	43	43	44	45	42	49
Regional	33	34	32	34	34	33	27	29	25
Distant	18	18	17	18	18	17	20	22	17
Unstaged	6	5	6	5	5	6	8	7	8
5-Year Relative Survival (Percent), 2004-2010 ^c									
Age at Diagnosis:									
Ages <45	69.7	66.3	73.8	70.2	66.2	74.8	62.6	57.8	67.9
Ages 45-54	74.2	71.7	77.7	74.5	72.4	77.6	67.9	62.8	73.6
Ages 55-64	70.8	69.3	73.2	70.8	69.6	72.9	66.4	62.2	71.8
Ages 65-74	67.3	66.5	68.6	67.2	66.9	67.7	63.1	57.1	69.6
Ages 75+	52.3	53.2	51.6	52.9	53.9	52.0	42.6	41.7	43.1
Ages <65	71.9	69.8	75.1	72.1	70.2	75.0	66.4	61.7	71.9
Ages 65+	59.9	60.8	58.9	59.9	61.1	58.5	54.2	51.9	56.2
Stage ^e :									
All Stages	66.5	66.0	67.2	66.4	66.2	66.7	62.0	58.5	65.6
Localized	87.9	87.5	88.5	87.6	87.2	88.1	86.1	84.5	87.7
Regional	69.8	69.9	69.6	70.3	70.7	69.7	62.5	60.3	65.2
Distant	13.4	12.7	14.3	13.6	13.0	14.4	10.9	10.4	11.6
Unstaged	46.4	46.1	46.7	42.4	42.1	42.5	53.0	50.2	55.2

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2011.

^c SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Based on follow-up of patients into 2011.

^d Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2004-2010 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 6.15
Cancer of the Colon and Rectum (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Survival Time																				
1-year	74.0	77.1	80.0	80.9	79.4	81.3	80.3	82.1	82.3	81.9	83.1	83.3	82.5	83.5	84.0	83.6	83.9	84.6	84.2	83.9
2-year	63.0	66.8	71.1	72.4	71.3	73.3	72.4	74.5	74.6	74.5	75.7	76.9	75.8	76.6	77.0	77.1	77.1	78.2	77.0	
3-year	56.8	60.5	65.7	67.2	65.8	68.6	67.3	69.4	70.0	70.3	71.2	72.3	70.9	71.6	72.5	72.1	72.2	73.0		
4-year	53.0	56.4	61.8	63.2	61.9	65.0	64.2	66.3	66.9	67.0	68.3	69.1	67.8	68.4	68.8	68.3	68.8			
5-year	50.4	53.7	59.3	60.7	59.7	62.5	61.5	63.3	64.6	64.9	66.2	66.4	65.4	65.8	66.1	65.9				
6-year	48.6	51.8	57.5	59.0	57.3	61.3	59.8	61.5	63.1	63.2	64.2	64.5	63.5	63.9	64.3					
7-year	47.3	50.3	56.0	57.4	55.6	60.2	58.9	60.2	62.0	61.7	62.3	63.1	62.1	62.7						
8-year	46.4	49.3	54.9	56.2	54.9	59.5	58.0	59.4	60.8	60.3	61.4	62.0	61.3							
9-year	45.7	48.4	54.1	55.4	54.6	58.8	57.3	58.2	59.9	59.6	60.4	60.7								
10-year	45.1	47.8	53.3	54.6	53.9	58.1	56.5	57.4	59.3	58.9	59.6									
11-year	44.5	47.2	52.8	54.1	53.1	57.5	55.7	56.5	58.5	57.9										
12-year	44.1	46.7	52.4	53.5	52.4	57.4	55.3	56.3	57.9											
13-year	43.6	46.4	51.6	53.0	51.7	56.8	55.0	55.7												
14-year	43.1	45.9	51.3	52.6	51.2	55.8	54.0													
15-year	42.8	45.6	50.8	52.2	50.6	55.1														
16-year	42.3	45.1	50.6	52.2	49.9															
17-year	41.9	44.7	50.0	51.5																
18-year	41.5	44.3	49.6																	
19-year	41.5	43.8	49.3																	
20-year	41.3	43.6	48.9																	
21-year	40.9	42.8	48.8																	
22-year	40.6	42.3	48.6																	
23-year	40.0	42.1																		
24-year	39.7	41.7																		
25-year	39.4	41.2																		
26-year	38.9	40.7																		
27-year	38.4	40.3																		
28-year	38.2																			
29-year	37.7																			
30-year	37.2																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 6.16
Cancer of the Colon and Rectum (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Survival Time																				
1-year	74.0	78.0	81.0	81.7	81.0	82.6	81.3	82.1	83.4	83.6	85.1	83.2	83.2	84.5	84.7	84.7	85.4	86.3	85.4	85.3
2-year	63.0	67.2	72.4	73.2	72.6	75.0	73.6	74.4	75.2	76.3	77.5	76.6	76.3	77.9	78.0	78.2	78.3	79.2	78.2	
3-year	56.3	60.6	66.7	67.9	66.9	69.7	68.2	68.8	70.5	72.0	72.9	72.1	71.2	72.6	73.2	72.9	73.3	73.9		
4-year	52.1	56.2	62.4	63.5	63.1	65.3	65.2	65.4	67.5	69.0	70.0	68.7	67.9	69.2	68.8	68.7	69.4			
5-year	49.3	53.3	59.7	60.5	60.0	62.4	62.3	62.4	64.9	66.1	67.4	65.8	65.5	66.2	65.9	66.4				
6-year	47.2	51.2	57.8	58.5	57.3	61.0	60.3	60.1	63.7	63.8	65.1	63.6	62.9	64.3	63.7					
7-year	45.9	49.5	56.2	56.8	55.6	59.8	59.7	58.8	62.5	62.0	63.2	61.8	61.7	62.6						
8-year	44.8	48.4	55.3	55.3	55.1	59.4	58.3	57.5	61.2	60.1	62.5	60.5	60.4							
9-year	44.1	47.5	54.2	54.5	54.6	58.9	57.4	56.3	60.1	59.7	61.5	59.5								
10-year	43.3	46.7	53.5	53.6	53.9	58.0	56.8	55.7	59.2	58.7	60.5									
11-year	42.8	46.0	53.1	53.1	53.1	57.3	55.9	54.7	58.6	57.8										
12-year	42.1	45.6	52.5	52.7	52.2	57.0	55.7	54.2	57.9											
13-year	41.7	45.4	51.8	52.0	51.7	56.6	55.3	53.7												
14-year	41.0	44.6	51.7	51.5	50.7	55.7	54.6													
15-year	40.7	44.5	51.1	50.9	49.8	55.3														
16-year	40.3	44.2	51.0	50.9	49.2															
17-year	39.7	43.7	50.5	50.5																
18-year	39.4	43.3	50.1																	
19-year	39.3	42.8	49.8																	
20-year	39.2	42.5	49.4																	
21-year	38.9	41.6	49.3																	
22-year	38.4	41.0	49.3																	
23-year	38.0	40.8																		
24-year	37.6	40.2																		
25-year	37.1	39.9																		
26-year	36.3	39.1																		
27-year	35.7	38.6																		
28-year	35.5																			
29-year	35.1																			
30-year	34.1																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 6.17
Cancer of the Colon and Rectum (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Survival Time																				
1-year	73.9	76.3	78.9	80.0	78.0	79.9	79.3	82.0	81.2	80.3	81.1	83.4	81.7	82.5	83.3	82.5	82.5	83.0	82.9	82.5
2-year	63.0	66.4	69.8	71.6	70.0	71.6	71.2	74.6	73.9	72.6	73.8	77.2	75.3	75.3	75.9	76.0	75.7	77.0	75.7	
3-year	57.4	60.3	64.6	66.4	64.6	67.4	66.2	70.0	69.6	68.6	69.5	72.4	70.5	70.6	71.8	71.2	71.0	72.2		
4-year	53.8	56.6	61.2	63.0	60.8	64.7	63.1	67.2	66.3	65.0	66.6	69.4	67.6	67.5	68.7	67.9	68.1			
5-year	51.4	54.1	58.9	60.9	59.4	62.7	60.6	64.2	64.3	63.6	64.9	67.0	65.3	65.4	66.3	65.5				
6-year	49.8	52.3	57.2	59.5	57.3	61.6	59.3	62.8	62.5	62.5	63.4	65.6	64.2	63.5	65.0					
7-year	48.7	51.0	55.7	58.1	55.5	60.7	58.0	61.4	61.5	61.5	61.4	64.3	62.6	62.8						
8-year	47.9	50.1	54.6	57.1	54.8	59.4	57.7	61.2	60.3	60.5	60.2	63.6	62.2							
9-year	47.3	49.4	53.9	56.3	54.6	58.6	57.1	60.0	59.7	59.4	59.2	61.8								
10-year	46.7	48.7	53.0	55.6	53.9	58.1	56.2	59.2	59.4	59.2	58.6									
11-year	46.1	48.2	52.5	55.0	53.1	57.7	55.5	58.4	58.5	58.0										
12-year	45.9	47.7	52.3	54.4	52.5	57.7	54.8	58.3	57.8											
13-year	45.5	47.4	51.4	54.1	51.8	56.9	54.5	57.6												
14-year	45.1	47.0	51.0	53.8	51.7	55.9	53.5													
15-year	44.6	46.6	50.5	53.5	51.4	54.9														
16-year	44.2	45.9	50.0	53.4	50.6															
17-year	44.0	45.6	49.4	52.5																
18-year	43.4	45.2	49.1																	
19-year	43.4	44.7	48.8																	
20-year	43.1	44.5	48.4																	
21-year	42.7	43.9	48.3																	
22-year	42.5	43.5	47.8																	
23-year	41.9	43.3																		
24-year	41.5	43.1																		
25-year	41.4	42.3																		
26-year	41.1	42.1																		
27-year	40.6	41.7																		
28-year	40.5																			
29-year	39.9																			
30-year	39.8																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 6.21
Cancer of the Colon and Rectum (Invasive)

SEER Incidence and U.S. Mortality
Age-Adjusted Rates and Trends^a
By Race/Ethnicity and Sex

SEER Incidence	SEER 18 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2007-2011			Trend 2002-2011 ^c			Trend 2002-2011 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	43.7	50.6	38.2	-2.9*	-3.1*	-2.8*	-3.1*	-3.3*	-3.0*
White	42.9	49.6	37.3	-3.2*	-3.4*	-3.0*	-3.4*	-3.7*	-3.2*
White Hispanic ^e	38.1	46.2	31.8	-1.5*	-1.5*	-1.4*	-	-	-
White Non-Hispanic ^e	43.7	50.3	38.1	-3.3*	-3.6*	-3.1*	-	-	-
Black	53.6	62.3	47.5	-3.2*	-2.9*	-3.2*	-3.0*	-3.3*	-3.1*
Asian/Pacific Islander	36.9	43.1	32.0	-2.2*	-2.5*	-1.1*	-	-	-
Amer Ind/Alaska Nat ^f	40.0	45.5	35.5	-0.3	-0.2	-0.5	-	-	-
Hispanic ^e	37.2	44.9	31.2	-1.6*	-1.2*	-1.5*	-	-	-

U.S. Mortality ^g	Rate 2007-2011			Trend 2002-2011 ^h		
	Rate per 100,000 persons			AAPC (%)		
	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY						
All Races						
White						
White Hispanic ^e						
White Non-Hispanic ^e						
Black						
Asian/Pacific Islander						
Amer Ind/Alaska Nat						
Total U.S.						
CHSDA Counties						
Non-CHSDA Counties						
Hispanic ^e						

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry, and Rural Georgia.

The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG.

^c The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2011.

^d The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2011.

^e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2007-2011 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, North Dakota, and South Carolina. The 2002-2011 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, South Carolina and Vermont.

^f Incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^g US Mortality Files, National Center for Health Statistics, CDC.

^h The 2002-2011 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2011.

* The APC is significantly different from zero (p<.05).

Table 6.22
Cancer of the Colon (Invasive) and Cancer of the Rectum (Invasive)

SEER Incidence
Age-Adjusted Rates and Trends^a
By Race/Ethnicity and Sex

Cancer of the Colon <u>SEER Incidence</u>	SEER 18 Areas ^b Rate 2007-2011 Rate per 100,000 persons			SEER 13 Areas ^b Trend 2002-2011 ^c AAPC (%)			SEER 9 Areas ^b Trend 2002-2011 ^d AAPC (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
	RACE/ETHNICITY								
All Races	31.1	34.8	28.2	-3.2*	-3.4*	-3.2*	-3.5*	-3.5*	-3.5*
White	30.6	34.3	27.5	-3.4*	-3.7*	-3.4*	-3.6*	-3.8*	-3.4*
White Hispanic ^e	26.3	30.7	23.0	-1.8*	-1.7*	-1.8*	-	-	-
White Non-Hispanic ^e	31.2	34.8	28.2	-3.5*	-3.8*	-3.5*	-	-	-
Black	40.1	45.4	36.4	-3.1*	-3.3*	-3.6*	-3.6*	-3.7*	-3.6*
Asian/Pacific Islander	24.5	27.2	22.4	-2.8*	-3.1*	-1.3*	-	-	-
Amer Ind/Alaska Nat ^f	27.8	30.0	26.3	-0.7	-1.1	-0.4	-	-	-
Hispanic ^e	25.7	29.8	22.6	-1.8*	-1.3*	-1.9*	-	-	-
Cancer of the Rectum <u>SEER Incidence</u>	SEER 18 Areas ^b Rate 2007-2011 Rate per 100,000 persons			SEER 13 Areas ^b Trend 2002-2011 ^c AAPC (%)			SEER 9 Areas ^b Trend 2002-2011 ^d AAPC (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
	RACE/ETHNICITY								
All Races	12.6	15.7	10.0	-2.1*	-2.4*	-1.6*	-2.3*	-2.6*	-2.0*
White	12.3	15.4	9.7	-2.5*	-2.8*	-1.8*	-2.7*	-3.2*	-2.4*
White Hispanic ^e	11.8	15.5	8.8	-0.6*	-0.8*	-0.6*	-	-	-
White Non-Hispanic ^e	12.5	15.5	9.9	-2.6*	-3.0*	-1.9*	-	-	-
Black	13.5	16.9	11.1	-2.1	-0.9*	-0.3	-0.2	-2.4	-0.2
Asian/Pacific Islander	12.4	15.9	9.7	-1.1*	-1.3*	-0.7*	-	-	-
Amer Ind/Alaska Nat ^f	12.2	15.5	9.2	0.4	-	-	-	-	-
Hispanic ^e	11.5	15.0	8.6	-0.7*	-0.8*	-0.6*	-	-	-

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends

are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry, and Rural Georgia.

The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG.

^c The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2011.

^d The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2011.

^e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^f Incidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

* The APC is significantly different from zero (p<.05).

Table 6.23
Cancer of the Colon and Rectum (Invasive)

Age-Adjusted SEER Incidence Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2007-2011</u>									
California	41.52	47.88	36.29	41.19	47.57	35.84	52.34	59.27	47.14
Greater Bay Area	41.51	46.26	37.56	41.87	46.52	37.90	49.28	56.60	44.18
San Francisco-Oakland	43.27	48.30	39.15	43.62	48.31	39.61	50.19	58.28	44.53
San Jose-Monterey	38.05	42.29	34.40	38.81	43.38	34.89	42.45	47.04	39.73
Los Angeles	43.04	50.50	37.20	41.57	48.98	35.68	56.67	64.41	51.06
Greater California	40.84	47.28	35.43	40.88	47.39	35.34	49.17	55.38	44.15
Connecticut	42.71	49.41	37.37	41.95	48.38	36.76	49.97	61.90	42.18
Detroit	46.03	52.62	41.09	43.59	50.15	38.46	55.67	64.11	50.15
Georgia	43.29	50.80	37.55	40.77	48.12	34.94	51.97	61.08	45.84
Atlanta	41.79	48.26	36.98	37.70	44.25	32.56	51.06	58.19	46.36
Rural Georgia	42.81	51.36	37.05	37.36	43.65	32.94	53.81	69.05	44.32
Greater Georgia	44.09	51.99	37.97	42.01	49.72	35.88	52.68	62.59	45.82
Hawaii	46.38	56.46	37.35	43.00	50.02	35.21	26.59	29.58	-
Iowa	48.40	55.77	42.12	48.20	55.49	41.98	57.89	63.53	53.15
Kentucky	52.65	62.42	45.00	52.12	61.93	44.42	60.78	70.91	53.31
Louisiana	51.04	60.76	43.53	47.99	57.56	40.21	60.95	73.28	52.80
New Jersey	45.41	52.62	39.89	45.08	52.38	39.41	50.12	58.16	44.64
New Mexico	37.12	42.96	32.17	36.93	42.78	32.00	30.83	22.69	35.31
Seattle-Puget Sound	40.67	46.05	36.14	40.25	45.29	35.92	45.48	53.00	38.75
Utah	34.02	38.14	30.45	34.11	38.38	30.41	36.50	-	-
9 SEER Areas ^b	42.85	48.94	37.85	41.78	47.59	36.90	51.87	59.69	46.51
11 SEER Areas ^b	42.60	48.87	37.50	41.54	47.59	36.52	53.02	60.74	47.63
13 SEER Areas ^b	42.68	48.97	37.57	41.53	47.57	36.51	53.02	60.86	47.56
18 SEER Areas ^b	43.71	50.59	38.15	42.86	49.65	37.26	53.59	62.34	47.51

^a Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.28
Cancer of the Colon and Rectum (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2011
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <19 ^e	0 to <36 ^e	>=36 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	403,434	281,507	193,503	116,069	76,677	43,080	1,013,148	1,140,625	21,801	1,162,426
	Males	206,233	141,727	97,318	56,567	37,430	18,506	511,310	567,872	7,585	575,457
	Females	197,201	139,780	96,185	59,502	39,247	24,574	501,838	572,753	14,216	586,969
White ^b	Both Sexes	330,229	238,982	166,908	100,366	66,971	38,458	852,636	965,306	19,172	984,478
	Males	170,643	122,414	84,789	49,390	33,264	16,513	435,487	486,080	6,763	492,843
	Females	159,586	116,568	82,119	50,976	33,707	21,945	417,149	479,226	12,409	491,635
Black ^b	Both Sexes	47,635	27,646	17,838	10,579	6,858	3,315	105,375	115,742	1,633	117,375
	Males	22,021	11,691	7,815	4,628	2,708	1,308	46,939	50,729	515	51,244
	Females	25,614	15,955	10,023	5,951	4,150	2,007	58,436	65,013	1,118	66,131
Asian/ Pacific Islander ^c	Both Sexes	17,551	10,605	6,452	+	+	+	37,770	+	+	+
	Males	9,130	5,358	3,296	+	+	+	19,376	+	+	+
	Females	8,421	5,247	3,156	+	+	+	18,394	+	+	+
Hispanic ^d	Both Sexes	30,018	16,387	9,618	+	+	+	60,324	+	+	+
	Males	16,210	8,541	5,180	+	+	+	32,041	+	+	+
	Females	13,808	7,846	4,438	+	+	+	28,283	+	+	+

Estimated prevalence percent^a on January 1, 2011, of the SEER^c population diagnosed in the previous 19 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)										Age-Adjusted ^f
		All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races ^c	Both Sexes	0.2903%	-	0.0003%	0.0054%	0.0256%	0.1062%	0.3440%	0.7582%	1.5438%	2.3444%	0.2837%
	Males	0.2977%	-	0.0003%	0.0051%	0.0261%	0.1120%	0.3789%	0.8947%	1.8340%	2.6447%	0.3269%
	Females	0.2832%	-	0.0002%	0.0058%	0.0251%	0.1005%	0.3106%	0.6346%	1.3104%	2.1686%	0.2494%
White ^c	Both Sexes	0.3037%	-	0.0003%	0.0059%	0.0263%	0.1036%	0.3285%	0.7322%	1.5490%	2.3641%	0.2806%
	Males	0.3116%	-	0.0003%	0.0054%	0.0267%	0.1078%	0.3660%	0.8720%	1.8444%	2.6569%	0.3241%
	Females	0.2958%	-	0.0003%	0.0063%	0.0258%	0.0992%	0.2915%	0.6017%	1.3055%	2.1911%	0.2450%
Black ^c	Both Sexes	0.2427%	-	-	0.0043%	0.0231%	0.1179%	0.4092%	0.9427%	1.6686%	2.2417%	0.3108%
	Males	0.2295%	-	-	0.0050%	0.0211%	0.1174%	0.4159%	1.0542%	1.8362%	2.4503%	0.3373%
	Females	0.2548%	-	-	0.0037%	0.0248%	0.1184%	0.4033%	0.8547%	1.5523%	2.1419%	0.2929%
Asian/ Pacific Islander ^c	Both Sexes	0.2633%	-	-	0.0035%	0.0229%	0.1028%	0.3556%	0.7371%	1.3975%	2.2217%	0.2700%
	Males	0.2792%	-	-	0.0031%	0.0247%	0.1217%	0.3940%	0.8672%	1.7024%	2.5992%	0.3187%
	Females	0.2488%	-	-	0.0038%	0.0212%	0.0859%	0.3226%	0.6293%	1.1632%	1.9897%	0.2334%
Hispanic ^d	Both Sexes	0.1208%	-	-	0.0032%	0.0205%	0.0772%	0.2672%	0.6349%	1.1851%	1.7389%	0.2212%
	Males	0.1258%	-	-	0.0031%	0.0220%	0.0812%	0.2891%	0.7714%	1.5159%	2.1220%	0.2676%
	Females	0.1157%	-	-	0.0033%	0.0190%	0.0730%	0.2464%	0.5186%	0.9411%	1.5111%	0.1869%

- ^a US 2011 cancer prevalence counts are based on 2011 cancer prevalence proportions from the SEER registries and 1/1/2011 US population estimates based on the average of 2010 and 2011 population estimates from the US Bureau of the Census.
- ^{b c d} Prevalence was calculated using the First Malignant Primary Only for a person. Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.
- ^e Maximum limited-duration prevalence: 36 years for 1975-2011 SEER 9 data; 19 years for 1992-2011 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).
- ^f Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.
- ^{g h i} (g) Cases diagnosed more than 36 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <36 and >=36. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.
- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.
- + Not available.

Table 6.29

Cancer of the Colon And Rectum (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2007-2011
Both Sexes by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	182,283	99.5%	143,653	99.5%	21,610	99.4%	14,060	99.4%	922	99.2%	18,146	99.4%
Epidermoid carcinoma ^d (8051-8131)	1,056	0.6%	893	0.6%	125	0.6%	21	0.1%	-	-	83	0.5%
Squamous cell carcinoma (8070-8078,8083-8084)	1,004	0.5%	848	0.6%	120	0.6%	21	0.1%	-	-	77	0.4%
Adenocarcinoma (8050,8140-8147, 8160-8162,8180-8221, 8250-8507,8520-8551,8560, 8570-8574,8576,8940-8941)	171,165	93.4%	136,032	94.2%	19,651	90.4%	13,059	92.4%	861	92.7%	16,906	92.6%
Adenocarcinoma, NOS (8140)	117,304	64.0%	92,859	64.3%	13,628	62.7%	9,305	65.8%	631	67.9%	11,606	63.5%
Adenocarcinoma in adenomatous polyp (8210)	15,066	8.2%	11,912	8.2%	1,572	7.2%	1,243	8.8%	76	8.2%	1,347	7.4%
Adenocarcinoma in villous adenoma (8261)	4,845	2.6%	3,916	2.7%	517	2.4%	344	2.4%	21	2.3%	598	3.3%
Mucinous adenocarcinoma (8470-8473,8480,8482)	11,753	6.4%	9,705	6.7%	1,246	5.7%	690	4.9%	46	5.0%	1,233	6.8%
Mucin-producing adenocarcinoma (8481)	2,119	1.2%	1,716	1.2%	288	1.3%	108	0.8%	-	-	194	1.1%
Signet ring adenocarcinoma (8490)	1,967	1.1%	1,625	1.1%	177	0.8%	145	1.0%	-	-	204	1.1%
Other adenocarcinomas ^e	18,111	9.9%	14,299	9.9%	2,223	10.2%	1,224	8.7%	75	8.1%	1,724	9.4%
Other specific carcinomas (8012-8015,8030-8046, 8150-8155,8170-8175, 8230-8249,8508,8510-8513, 8561-8562,8575,8580-8671)	8,419	4.6%	5,454	3.8%	1,630	7.5%	859	6.1%	42	4.5%	1,001	5.5%
Neuroendocrine carcinoid (8240-8245)	6,670	3.6%	4,071	2.8%	1,411	6.5%	746	5.3%	34	3.7%	834	4.6%
Other ^f	1,749	1.0%	1,383	1.0%	219	1.0%	113	0.8%	-	-	167	0.9%
Unspecified, Carcinoma, NOS (8010-8011, 8020-8022)	1,643	0.9%	1,274	0.9%	204	0.9%	121	0.9%	18	1.9%	156	0.9%

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Estimates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^e Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

^f Includes histologies 8050, 8141-8147, 8160-8162, 8180-8204, 8211-8221, 8250-8260, 8262-8264, 8270-8463, 8500-8507, 8514, 8520-8551, 8560, 8570-8574, 8576, 8940-8941.

^f Includes histologies 8012-8015, 8030-8046, 8150-8155, 8170-8175, 8230-8231, 8246-8249, 8508, 8510-8513, 8561-8562, 8575, 8580-8671.

- Statistic not shown due to fewer than 16 cases during the time period.

Table 6.29 - continued

Cancer of the Colon And Rectum (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2007-2011
Both Sexes by Race

Histology ^a	<u>All Races</u>		<u>White</u>		<u>Black</u>		<u>Asian/Pacific Islander</u>		<u>American Indian/ Alaska Native^b</u>		<u>Hispanic^c</u>	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Sarcoma and other soft tissue tumors (8680-8713,8800-8921, 8990-8991,9040-9044, 9120-9136,9150-9252, 9370-9373,9540-9582)	107	0.1%	89	0.1%	-	-	-	-	-	-	-	-
Other specific types (8720-8790,8930-8936, 8950-8983,9000-9030, 9060-9110,9260-9365, 9380-9539)	287	0.2%	201	0.1%	48	0.2%	37	0.3%	-	-	36	0.2%
Unspecified (8000-8005)	606	0.3%	457	0.3%	65	0.3%	37	0.3%	-	-	67	0.4%
Total ^d	183,283	100.0%	144,400	100.0%	21,735	100.0%	14,138	100.0%	929	100.0%	18,264	100.0%

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Estimates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

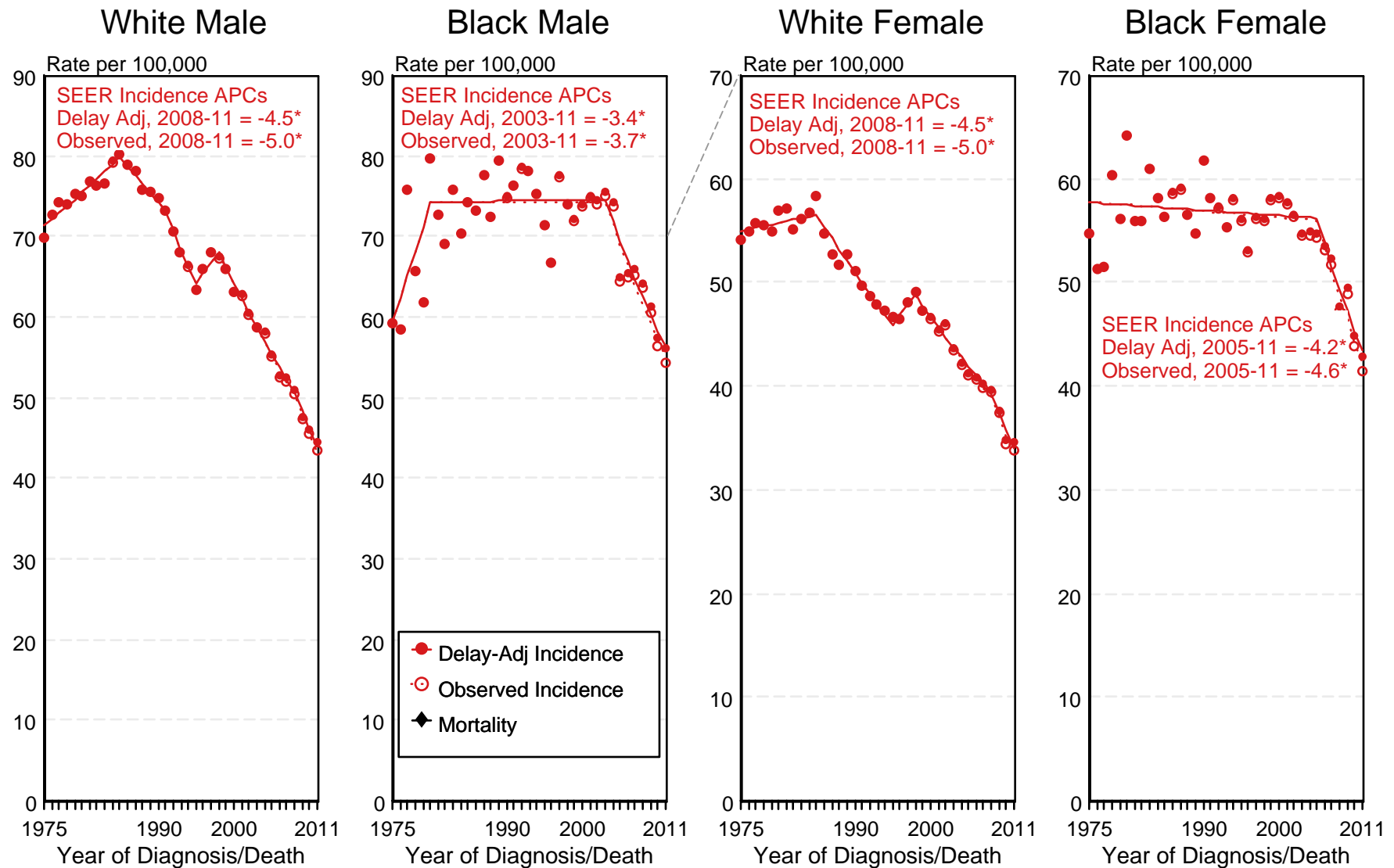
Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^d Total includes carcinoma cases from the previous page.

- Statistic not shown due to fewer than 16 cases during the time period.

Figure 6.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Colon and Rectum, by Race and Sex

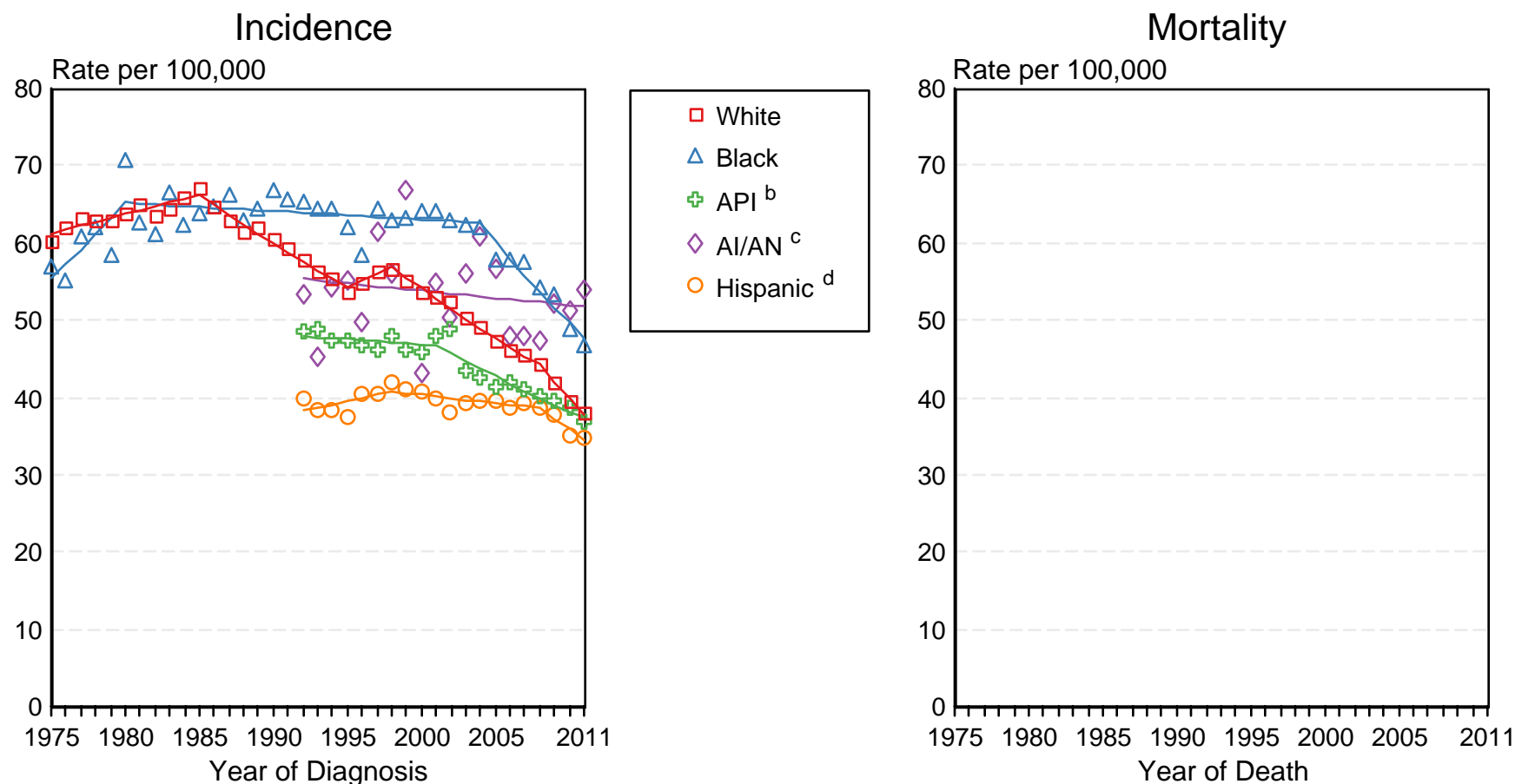


^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

Figure 6.2

SEER Incidence and US Death Rates^a Cancer of the Colon and Rectum, Both Sexes Joinpoint Analyses for Whites and Blacks from 1975-2011 and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2011



Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2011 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2011 allow a maximum of 3 joinpoints.

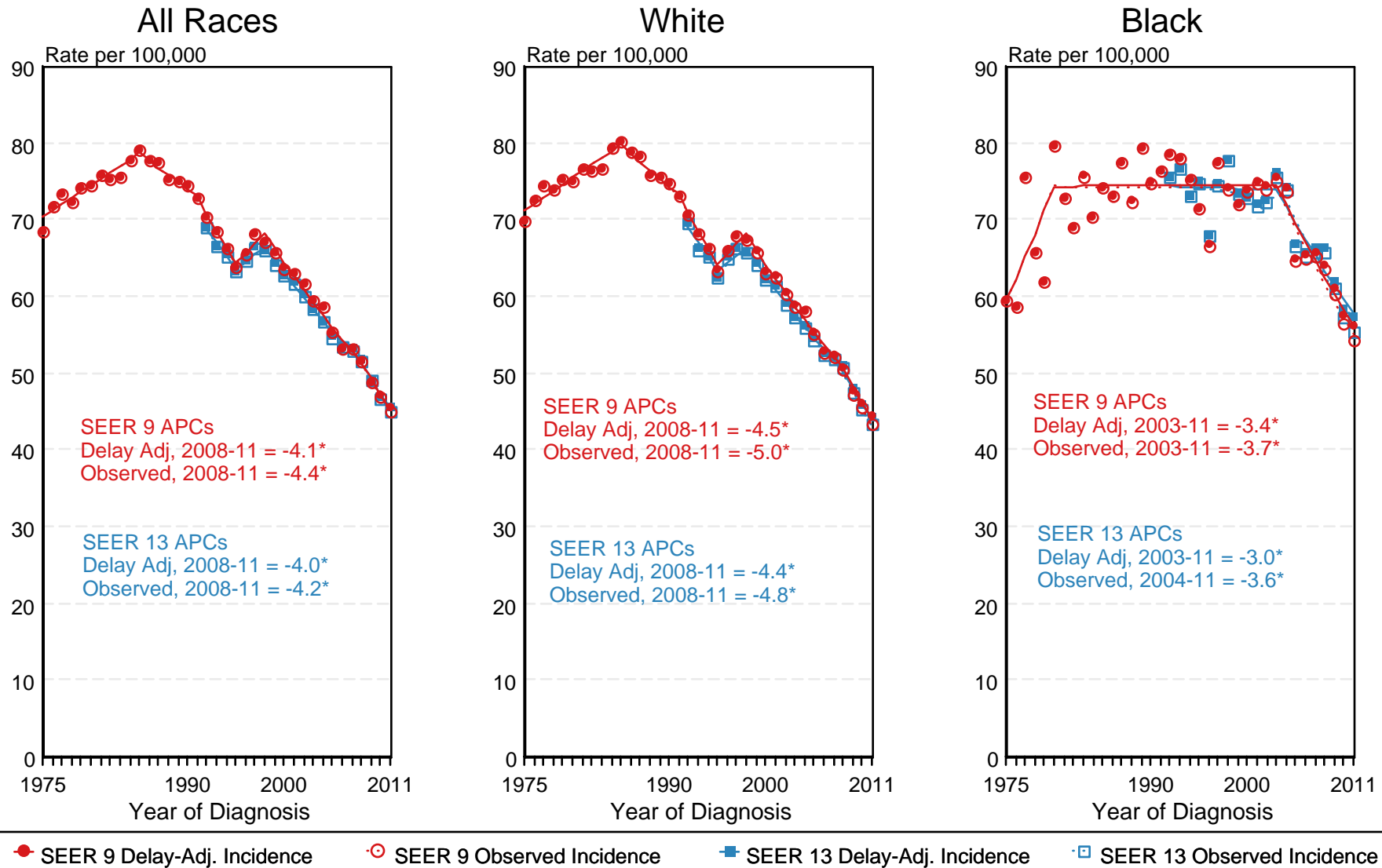
^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, South Carolina, Oklahoma, and Vermont.

Figure 6.3

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Colon and Rectum, Male, by Race



^a Source: SEER 9 areas and SEER 13 areas.

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

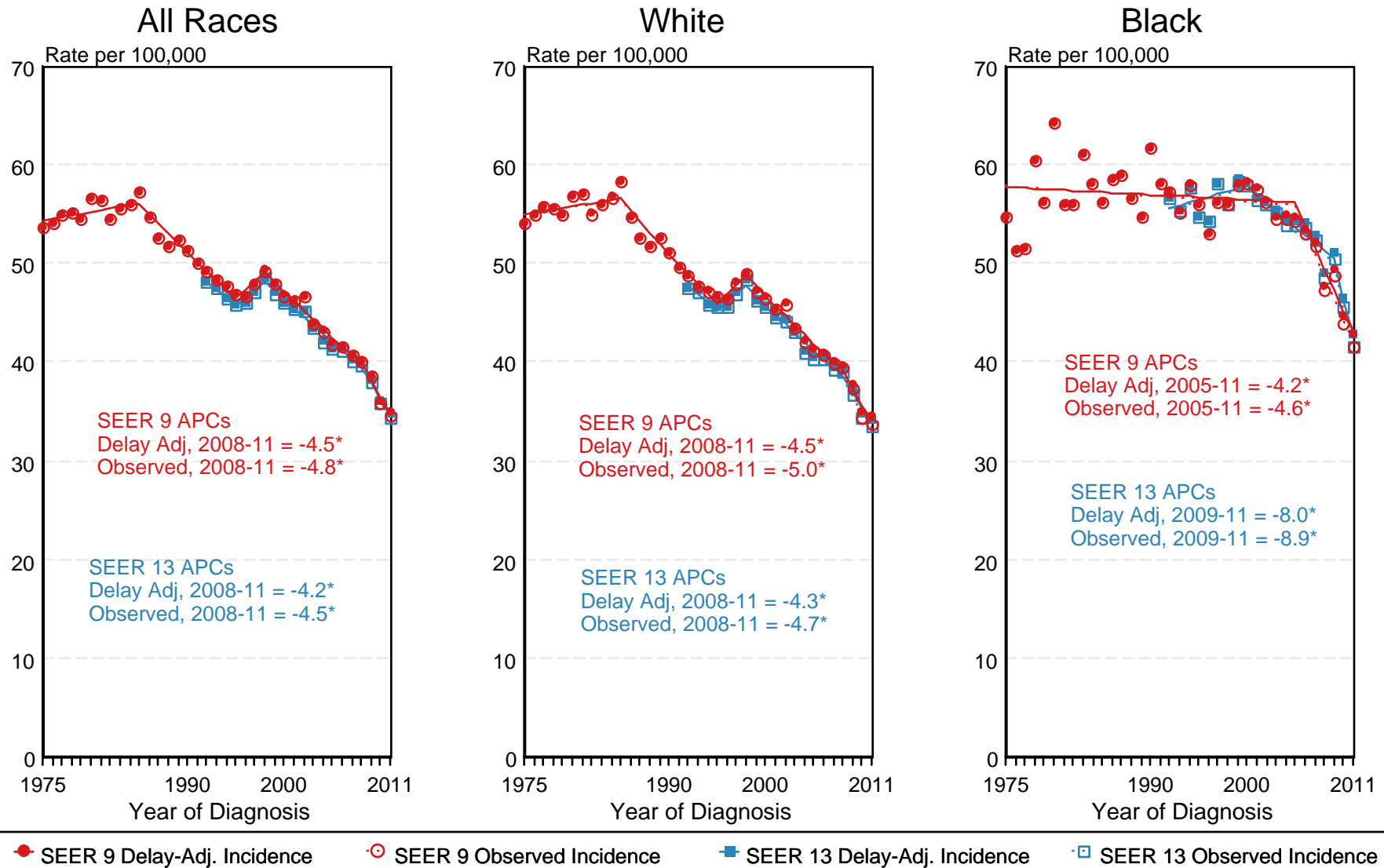
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

Figure 6.4

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Colon and Rectum, Female, by Race



^a Source: SEER 9 areas and SEER 13 areas.

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

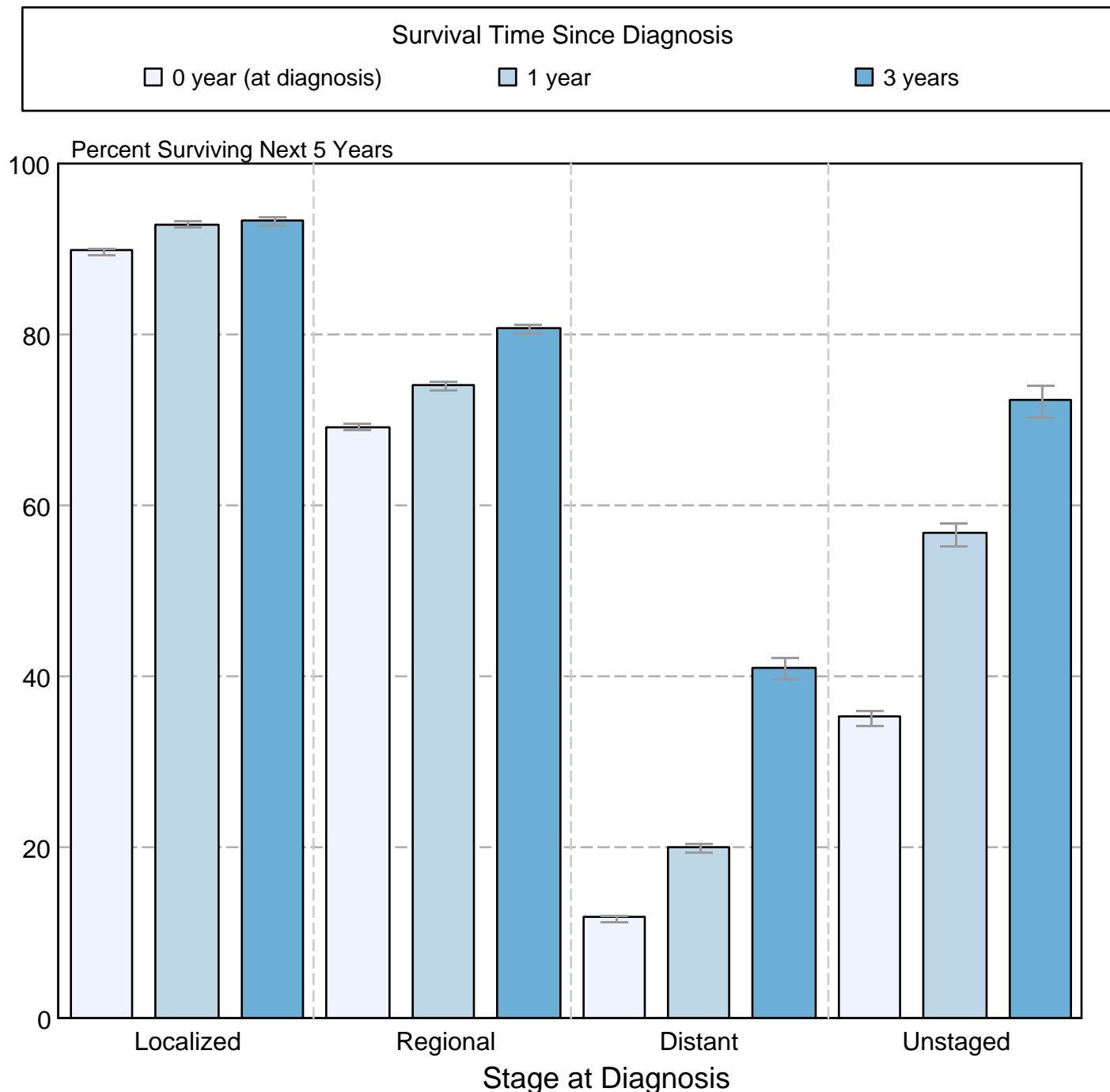
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

Figure 6.5

Cancer of the Colon and Rectum
5-Year SEER Conditional Relative Survival and
95% Confidence Intervals
 Probability of surviving the next 5 years given the cohort
 has already survived 0, 1, or 3 years
 1998-2010 by stage at diagnosis



Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000-2009. The remaining 13 SEER Areas contribute cases for the entire period 1998-2010. Percent surviving is not shown if based on less than 25 cases. Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.